

AMENDMENTS TO THE DRAWINGS

The first attached sheet of drawings includes changes to FIG. 1. The first attached sheet, which includes FIG. 1, replaces the Replacement Sheet including FIG. 1 submitted with the Amendment filed August 29, 2005. The second attached sheet of drawings includes changes to FIG. 2. The second attached sheet, which includes FIG. 2, replaces the Replacement Sheet including FIG. 2 submitted with the Amendment filed August 29, 2005. The third attached sheet, which includes FIG. 3, replaces the Replacement Sheet including FIG. 3 submitted with the Amendment filed August 29, 2005. The fourth attached sheet of drawings includes changes to FIG. 4. The fourth attached sheet, which includes FIG. 4, replaces the New Sheet including FIG. 4 submitted with the Amendment filed August 29, 2005.

Attachment: Replacement Sheets
Annotated Sheets Showing Changes

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Final Office Action dated February 16, 2006 has been received and its contents carefully reviewed.

FIG. 1 to FIG. 4 are hereby amended. FIG.1 to FIG. 3 are herein amended to correct minor typographical errors. The specification is hereby amended to reflect changes in FIG. 4. Also, the specification is hereby amended to correct minor typographical errors. Also, claims 1 and 2 are hereby amended. No new matter is added. Claim 5 is hereby cancelled. Claims 1-4 and 6-13 are pending. Claims 1-4 and 6 are currently examined and claims 7-13 are withdrawn from consideration. Reexamination and reconsideration of the examined claims are respectfully requested.

In the Office Action, FIG. 4 is objected to under 37 C.F.R. 1.83(a). Applicant hereby amends FIG. 4 to overcome the objection. Also, the specification is amended to reflect changes in FIG. 4. No new matter has been added. Accordingly, Applicant respectfully requests withdrawal of this objection.

In the Office Action, FIG. 1 is objected to for allegedly adding new matter. Applicant respectfully traverses this objection. The original disclosure clearly provides support for the location of the bar code reader. For example, in paragraph [0008], the disclosure states "a bar code reader formed at an arbitrary point of the shelf which is at one side of the stage reads a bar code...." Accordingly, Applicant respectfully requests withdrawal of this objection.

In the Office Action, claims 1, 2, 4 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,163,802 to Poinelli (hereinafter "Poinelli") in view of U.S. Patent No. 6,129,496 to Iwasaki et al. (hereinafter "Iwasaki"). Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Poinelli in view of Iwasaki, as applied to claim 1, and further in view of U.S. Patent No. 5,570,990 to Bonora et al. (hereinafter "Bonora"). Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Poinelli in view of Iwasaki, as applied to claim 1, and further in view of U.S. Patent No. 5,510,984 to Markin et al. (hereinafter "Markin"). Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. §

103(a) as being unpatentable over Iwasaki in view of Poinelli. Claims 1-4 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwasaki in view of Bonora. Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwasaki in view of Poinelli or Bonora, as applied to claim 1, and further in view of Markin.

The rejection of claims 1, 2, 4 and 6 as being unpatentable over Poinelli in view of Iwasaki is respectfully traversed and reconsideration is requested. Claim 1 is allowable over Poinelli in view of Iwasaki in that claim 1 recites a combination of elements including, for example, “the moving path unit includes a position detecting sensor to detect a position of the auto guided vehicle” and “the position detecting sensor is installed in front of at least one of the plurality of process stages.” None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. In contrast, Poinelli merely teaches a self-propelled robot having platforms on which magazines can be placed. See column 4, lines 20-25 and 30-40 and Figure 7. Furthermore, Poinelli is silent with respect to a “position detecting sensor.” Therefore, Poinelli does not teach or suggest “the moving path unit includes a position detecting sensor to detect a position of the auto guided vehicle” and “the position detecting sensor is installed in front of at least one of the plurality of process stages.” Iwasaki does not cure this deficiency of Poinelli as Iwasaki is also silent with respect to a “position detecting sensor.” Accordingly, Applicant respectfully submits that claim 1 and claims 2, 4 and 6, which depend therefrom, are allowable over the cited references.

The rejection of claim 3 as being unpatentable over Poinelli in view of Iwasaki as applied to claim 1, and further in view of Bonora is respectfully traversed and reconsideration is requested. Applicant respectfully submits that Bonora fails to cure the aforementioned defects associated with the teachings of Poinelli and Iwasaki. None of the cited references, singly or in combination, teaches or suggests “the moving path unit includes a position detecting sensor to detect a position of the auto guided vehicle” and “the position detecting sensor is installed in front of at least one of the plurality of process stages,” as recited in independent claim 1. For at least this reason, claim 3, which depends from claim 1, is allowable over the cited references.

The rejection of claim 5 as being unpatentable over Poinelli in view of Iwasaki as applied to claim 1, and further in view of Markin is respectfully traversed and reconsideration is requested. Claim 5 is herein cancelled, thus, the rejection of claim 5 is moot. The limitations of claim 5 are herein incorporated into independent claim 1. Furthermore, claim 1 is allowable over the cited references in that claim 1 recites "a plurality of process stages at which processes are conducted on a substrate during fabrication of the LCD device, wherein the position detecting sensor is installed in front of at least one of the plurality of process stages." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. Applicant respectfully submits that Markin fails to cure the aforementioned defects associated with the teachings of Poinelli and Iwasaki. Markin merely teaches an auto guided vehicle to be used in warehouses and laboratories in hospitals and clinics. See column 1, lines 13-15. The sensor in Markin is used to alert workers within a lab that a specimen is arriving. See column 1, lines 33-35. Thus, the auto guided vehicle of Markin is not used in fabricating a liquid crystal display device. That is, Markin is completely silent with respect to a "position detecting sensor... installed in front of at least one of the plurality of process stages" where the "process stages" are "at which processes are conducted on a substrate during fabrication of the LCD device."

Furthermore, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. Poinelli and Iwasaki are drawn to semiconductor wafer or semiconductor device process lines. However, as stated above, Markin is drawn to auto guided vehicles to be used in warehouses and laboratories in hospitals and clinics. One of ordinary skill in the art would not look to transfer systems in warehouses and hospital laboratories when concerned with the more delicate substrate transfer systems used in fabricating semiconductor devices. That is, one of ordinary skill in the art would realize that sensors and auto guided vehicles used in warehouses and hospital laboratories would not work in a substrate transfer system for semiconductor devices. Therefore, Applicant respectfully submit that Markin is non-analogous art for purposes of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention, and not from the cited references, which is impermissible. For at least these reasons, claim 1, and claims 2-4 and 6, which depend therefrom, are allowable over the cited references.

The rejection of claims 1, 2, 4 and 6 as being unpatentable over Iwasaki in view of Poinelli is respectfully traversed and reconsideration is requested. Claim 1 is allowable over Iwasaki in view of Poinelli in that claim 1 recites a combination of elements including, for example, “the moving path unit includes a position detecting sensor to detect a position of the auto guided vehicle” and “the position detecting sensor is installed in front of at least one of the plurality of process stages.” None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. In contrast, Iwasaki merely teaches an automatic carrier 38 for providing connection between stocker 36, various stocker controllers 60, 64 and 66, and inter-stocker transport device 42. See column 12, line 65 – col. 13, line 1 and Figures 1 and 2. Furthermore, Iwasaki is silent with respect to a “position detecting sensor.” Therefore, Iwasaki does not teach or suggest “the moving path unit includes a position detecting sensor to detect a position of the auto guided vehicle” and “the position detecting sensor is installed in front of at least one of the plurality of process stages.” Poinelli does not cure this deficiency of Iwasaki as Poinelli is also silent with respect to a “position detecting sensor.” Accordingly, Applicant respectfully submits that claim 1 and claims 2, 4 and 6, which depend therefrom, are allowable over the cited references.

The rejection of claims 1-4 and 6 as being unpatentable over Iwasaki in view of Bonora is respectfully traversed and reconsideration is requested. Claim 1 is allowable over Iwasaki in view of Bonora in that claim 1 recites a combination of elements including, for example, “the moving path unit includes a position detecting sensor to detect a position of the auto guided vehicle” and “the position detecting sensor is installed in front of at least one of the plurality of process stages.” None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. In contrast, Iwasaki merely teaches an automatic carrier 38 for providing connection between stocker 36, various stocker controllers 60, 64 and 66, and inter-stocker transport device 42. See column 12, line 65 – col. 13, line 1 and Figures 1 and 2. Furthermore, Iwasaki is silent with respect to a “position detecting sensor.” Therefore, Iwasaki does not teach or suggest “the moving path unit includes a position detecting sensor to detect a position of the auto guided vehicle” and “the position detecting sensor is installed in front of at least one of the plurality of process stages.” Bonora does not cure this deficiency of Iwasaki as Bonora is also silent with respect

to a "position detecting sensor." Accordingly, Applicant respectfully submits that claim 1 and claims 2-4 and 6, which depend therefrom, are allowable over the cited references.

The rejection of claim 5 as being unpatentable over Iwasaki in view of Poinelli or Bonora as applied to claim 1, and further in view of Markin is respectfully traversed and reconsideration is requested. Claim 5 is herein cancelled, thus, the rejection of claim 5 is moot. The limitations of claim 5 are herein incorporated into independent claim 1. Furthermore, claim 1 is allowable over the cited references in that claim 1 recites "a plurality of process stages at which processes are conducted on a substrate during fabrication of the LCD device, wherein the position detecting sensor is installed in front of at least one of the plurality of process stages." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. Applicant respectfully submits that Markin fails to cure the aforementioned defects associated with the teachings of Iwasaki and Poinelli or Bonora. Markin merely teaches an auto guided vehicle to be used in warehouses and laboratories in hospitals and clinics. See column 1, lines 13-15. The sensor in Markin is used to alert workers within a lab that a specimen is arriving. See column 1, lines 33-35. Thus, the auto guided vehicle of Markin is not used in fabricating a liquid crystal display device. That is, Markin is completely silent with respect to a "position detecting sensor...installed in front of at least one of the plurality of process stages" where the "process stages" are "at which processes are conducted on a substrate during fabrication of the LCD device."

Furthermore, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. Poinelli and Iwasaki are drawn to semiconductor wafer or semiconductor device process lines. However, as stated above, Markin is drawn to sensors and auto guided vehicles to be used in warehouses and laboratories in hospitals and clinics. One of ordinary skill in the art would not look to transfer systems in warehouses and hospital laboratories when concerned with the more delicate substrate transfer systems used in fabricating semiconductor devices. That is, one of ordinary skill in the art would realize that sensors and auto guided vehicles used in warehouses and hospital laboratories would not work in a substrate transfer system for semiconductor devices. Therefore, Applicant respectfully submit that Markin is non-analogous art for purposes of analyzing the

obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention, and not from the cited references, which is impermissible. For at least these reasons, claim 1, and claims 2-4 and 6, which depend therefrom, are allowable over the cited references.

Applicants believe the foregoing amendments and remarks place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: May 16, 2006

Respectfully submitted,

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Attachments